

# Epigenetics



**Our genes carry information that is passed from one generation to the next. Environmental factors (e.g. pollution) can get under our skin and affect our underlying biology.**

**Epigenetics is the study of how our behaviours (e.g. physical activity) and the environment impact how our genes work.**

For example, in two people with the same type of asthma, only one may be affected by air pollution due to their underlying biology



We asked members of our Healthy Ageing Advisory Group\* what they thought...

*"It's so interesting that we could be carrying a gene for disease and through interacting with our environment, we could be switching something on/off"*

*"There are so many factors at play which could determine how we approach behaviour change, prevention and education"*

Our stakeholders said...

**Epigenetics adds a new dimension to urban planning and the important role our environment plays in creating the conditions for good health**



If we can better understand what in our environment causes changes to our underlying biology, we can better help individuals who are impacted

**The environment in which we live can impact how our underlying biology works**

\*Members of the public representing older persons who helped shape our research and ensured we considered their lived experiences, insights and opinions